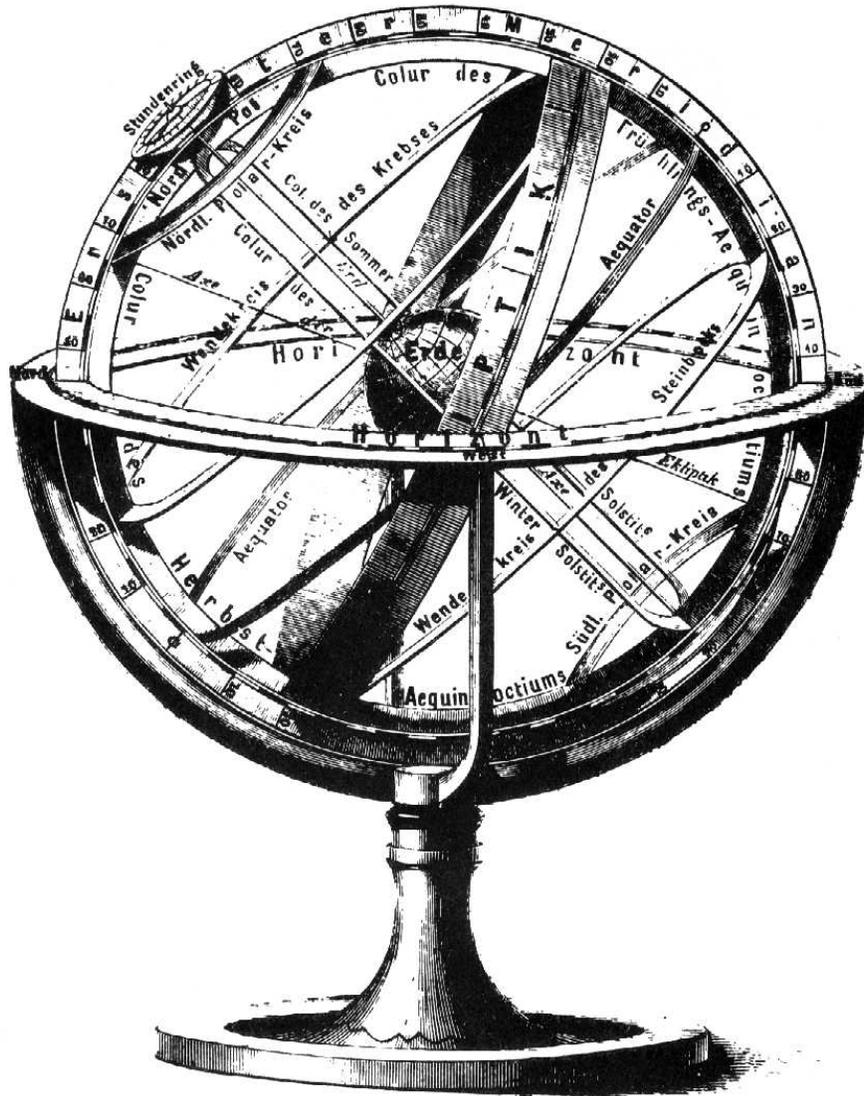


The New York Society Library Presents:



Introduction to the Internet

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INTERNET



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INTERNET HISTORY



- 1957: Russians launch Sputnik. President Eisenhower forms ARPA (Advanced Research Projects Agency) within Department of Defense.
- 1969: ARPANET links four computers for research purposes: Stanford Research Institute, UCLA, UC Santa Barbara, & University of Utah.
- 1977: Other networks start connecting to ARPANET, using TCP/IP (Transmission Control Protocol/ Internet Protocol).
- 1986: NSFNET (National Science Foundation Net) formed, connecting computers. Created regional network to connect schools and universities.
- 1988: Creation of the first internet worm by Robert Morris, resulting in IAB's Security and Ethics Statement in 1989:
- 1989: Internet Activities Board Security and Ethics Statement: The following are unethical and unacceptable on the Internet: unauthorized access, disrupting intended use, wasting resources (people, computers, etc), destroying integrity of information and compromising privacy.
- 1990: ARPANET disappears entirely.
- 1991: World Wide Web, developed by Tim Berners-Lee, is released by CERN.
- 1993: White House goes online for first time. Mosaic, the first web browser, brings in a staggering 341,634% increase in traffic
- 1994: Netscape Navigator released, allowing download of text & images.
- 1995: Microsoft Internet Explorer 1.0 is released, allowing different fonts and color. The Communications Decency Act was proposed by Senator Jim Exxon, attempting to outlaw the transmission of lewd material on the Internet. Prompted the development of web filtering tools for parents wishing to restrict websites for their children.
- 1997: The Supreme Court ruled that the Communications Decency Act violated the First Amendment.

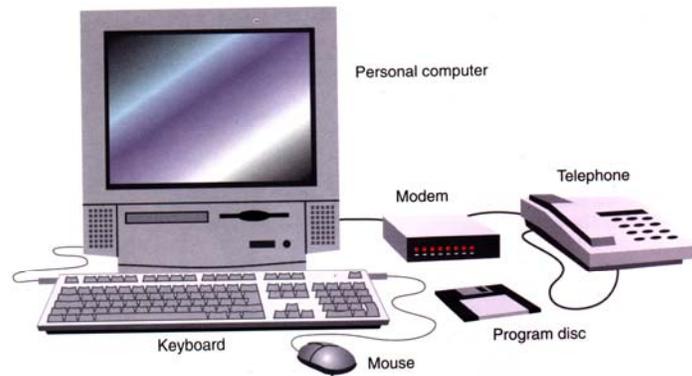
INTERNET BREAKDOWN



The Internet is a collection of networked computers and servers. Internet protocols include:

- E-MAIL: Electronic Mail (1969)
E-mail is an electronic means of sending messages online.
Current Use: almost everyone online- mostly through the Web
- TELNET: Telephone Network (1972)
Telnet is a text-based method of connecting to other computers on the Internet.
Current Use: System Administrators
- FTP: File Transfer Protocol (1972)
File Transfer Protocol (FTP) allows for the quick transfer of files between computers.
Current Use: Webmasters
- USENET: User Networks (1979)
Usenet is a collection of electronic bulletin boards (Newsgroups).
Current Use: Archival - <http://groups.google.com>
- LISTSERV: List Server (1986)
LISTSERV is a licensed electronic mailing distribution list.
Current Use: Specialized research
- IRC: Internet Relay Chat (1988)
Internet Relay Chat (IRC) is a text-based program that allows two or more people to type messages to each other in real time.
Current Use: Younger users
- WWW: World Wide Web (1993)
The Web is means of viewing pictures, text and graphics stored on the Internet
Current Use: everyone online

INTERNET CONNECTING



HARDWARE:

You will need a computer with either a modem, ethernet card or wireless card to connect to the Internet. Many laptops come with all three installed.

Connecting with a Modem:

- You will need a dial-up account, which uses your phone line and computer modem to dial up a local access number. This is the oldest (and slowest) way of connecting; no new cable is needed. The fastest modem speed is 56K (or 56 kilobytes of data transferred per second).

Connecting through Broadband:

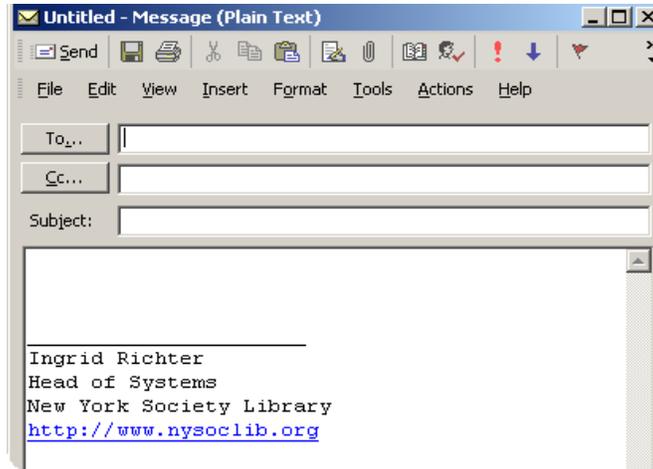
- CABLE MODEM: A cable modem modifies your cable TV connection to handle two-way data traffic. The speed is faster than a dial-up connection, but you share the Internet connection with your neighbors (the more people online at the same time, the slower the connection).
- DSL (Digital Subscriber Line): A DSL connection uses a thicker phone cable for accessing the Internet. The speed of your connection depends on which DSL service you buy (192K to 1.5M per second), but it is a dedicated connection.
- WIRELESS: A wireless connection uses your DSL or Broadband connection and radio waves instead of cables to connect to the Internet. Wireless connections are used mostly by laptops.

SOFTWARE

There are two types of online accounts. Both services will give you full access to the Internet and e-mail.

- Online Services (e.g. AOL), which will include extra features and a different interface (and higher price)
- Internet Service Provider (e.g. Verizon, Bway.net, Roadrunner, Time Warner), which will connect you with minimal fuss. Visit <http://www.thelist.com/areacode/212/> for a complete list of ISPs in New York City.

INTERNET E-MAIL



One of the most popular uses of the Internet, e-mail is short for "electronic mail", a means of sending messages from one Internet user to another. E-mail is broken down into:

To: Enter e-mail address here (no spaces)
From: Your e-mail address (automatically filled in)
Subject: The subject of the e-mail.
Cc: "Carbon Copy"
Bcc: "Blind Carbon Copy".
Attached: Place to attach electronic documents

Under the Line: This is the substance of your e-mail.
It's generally 80 characters across and the text wraps to fit.
Once you are done typing a message, click "Send" to mail.

E-MAIL ADDRESS TRANSLATION: systems@nysoclib.org

systems → The name or title of a specific person
@ → Stands for "at"
nysoclib. → This is the New York Society Library domain name
org → Stands for "Organization"

CAUTION!

E-mail is not encrypted when it is sent. Always assume that other people may see what you type into an e-mail message. Don't send confidential information (i.e. credit card numbers, social security numbers or passwords) through e-mail.

INTERNET WEB BROWSERS



Web browsers are free software programs that allow you to surf the web, once you have the appropriate connection in place.

Popular web browsers include: Internet Explorer (built-in to Microsoft operating systems), Safari (included with Macintosh operating systems) and Firefox (a free, customizable browser). Google has also released a new web browser, Google Chrome. AOL comes with its own web browser (AOL), built on Internet Explorer.

BOOKMARKS OR FAVORITES:

Bookmarks (or favorites) keep track of your favorite web sites, so that you won't have to enter the URL again. To add to favorites in Internet Explorer, choose Favorites → Add to Favorites. To sort your favorites alphabetically, right-click on any section of your favorites and choose "Sort by Name" from the drop-down menu.

CACHE

Browsers cache (or save) online web pages and pictures in a temporary folder on your computer to speed up your Internet time (when you revisit the site, it pulls the images and text from the cache instead of the server). This is great for speed, but it takes up space on your computer. The cache settings in Internet Explorer are under Tools → Internet Options → General → Browsing History. Click "Delete" to clear out your cache.

COOKIES

A cookie is a bit of information about you that another computer stores on your computer (it may keep track of passwords or user preferences). Amazon.com uses this to track your book interests; The New York Times online uses this to save your password. To change your cookie settings in Internet Explorer, choose "Tools → Internet Options → Privacy" to see how your browser is dealing with cookies.

HISTORY

Your web browser keeps track of all pages you visit in a day. To view your browsing history in Internet Explorer, go to View → Explorer Bar → History (or CTRL+SHIFT+H). To clear your browsing history in Internet Explorer, go to Tools → Internet Options → General → Browsing History. Click "Delete".

INTERNET SEARCH ENGINES



Search engines are the primary way to find information on the web. Some search engines work by automatically searching the contents of other systems and creating a database of the results. Other search engines contain only material manually approved for inclusion in a database, and some combine the two approaches. All search engines are free to use.

TOP TEN SEARCH ENGINES:

- | | |
|--------------------|---|
| 1. Google: | http://www.google.com |
| 2. Yahoo! Search | http://search.yahoo.com |
| 3. MSN Live Search | http://www.live.com |
| 4. AOL Search | http://search.aol.com |
| 5. Ask | http://www.ask.com |
| 6. AltaVista | http://www.altavista.com |
| 7. AllTheWeb | http://www.alltheweb.com |
| 8. Gigablast | http://www.gigablast.com |
| 9. Netscape Search | http://search.netscape.com |
| 10. Snap | http://www.snap.com |

TIPS

All search engines allow searching in natural language (i.e. typing out a complete sentence as your question). However, they'll throw out much of what you type. When you use a search engine, try to strip your search down to the essential key words instead of using natural language. You'll save time typing and you'll get better (more accurate) results from the search engine. Put all formal names in quotes - this forces the search engine to look for an exact match.

- Natural Language: What is the tallest building in Los Angeles?
- Search Language: tallest building "Los Angeles"

INTERNET GOOGLE

A screenshot of the Google search interface. It shows a search box, a "Google Search" button, an "I'm Feeling Lucky" button, and links for "Advanced Search", "Preferences", and "Language Tools".

Advanced Search
Preferences
Language Tools

Google Search I'm Feeling Lucky

<http://www.google.com>

Although there are many search engines out there, most Internet users prefer Google for accurate, fast results.

To search Google, simply type your (stripped-down) question into the box underneath the logo and click "Google Search" (or hit <ENTER> on your keyboard). The "I'm Feeling Lucky" button will take you directly to Google's pick for the best website result for your search, but you may not wish to use it.

For an advanced search, do not enter anything in the search box. Instead, click on the blue link "Advanced Search" to the right of the search box. This will bring up the Advanced Search screen:

A screenshot of the Google Advanced Search form. It includes fields for "Find web pages that have..." (all these words, this exact wording or phrase, one or more of these words) and "But don't show pages that have..." (any of these unwanted words). It also has dropdown menus for "Results per page", "Language", and "File type", and a text field for "Search within a site or domain".

Use the form below and your advanced search will appear here

Find web pages that have...

all these words:

this exact wording or phrase: OR

one or more of these words: OR

But don't show pages that have...

any of these unwanted words:

Need more tools?

Results per page:

Language:

File type:

Search within a site or domain:

(e.g. youtube.com, edu)

[Date, usage, rights, numeric range, and more](#)

Advanced Search

Google has many other search engine features. The most popular ones are listed at the top of the main page of Google: Images, Maps, News, Shopping and Gmail. Other Google features can be found by clicking on "More" or going to: <http://www.google.com/intl/en/options/>

SEARCH TIP:

Consider perform an image search instead of a text search if you are searching for a specific subject (i.e. George Washington, coelacanth). Human beings are faster at sorting through images rather than text.

Better searches. Better results.

Here are some nifty modifiers to type in your Google search box to refine your searches and get the best results.



Exact Phrase

What it does: searches for an exact phrase
What to type: "one small step for man"
What you'll get: results that include the exact phrase "one small step for man"



Excluded Words

What it does: excludes search results with a particular word or phrase
What to type: bass -fishing
What you'll get: results about bass that are not related to fishing



Similar Words

What it does: searches for a word and all its synonyms
What to type: ~mobile phone
What you'll get: results with the word "phone," as well as "cell," "cellular," "wireless," etc.



Multiple Words

What it does: searches for webpages that include either word
What to type: vacation London OR Paris
What you'll get: results with the word "vacation" and either "London" or "Paris"



Numerical Ranges

What it does: searches for a range of numbers
What to type: Willie Mays 1950...1960
What you'll get: results about Willie Mays during this time period

define:

Find Meanings

What it does: defines a word or phrase
What to type: define:plethora
What you'll get: links to definitions of the word "plethora"

site:

Site Specific

What it does: searches only particular websites
What to type: global warming site:edu
What you'll get: references to global warming found on .edu websites

link:

Linked Pages

What it does: searches for webpages that link to a particular website
What to type: link:www.umich.edu
What you'll get: websites that link to the University of Michigan website

1+1

Math Answers

What it does: basic calculator functions
What to type: 4+7, 30% of 55, 20^2, sqrt(4), etc.
What you'll get: the answer

cm in foot

Conversions

What it does: converts units of measure
What to type: cm in foot, 28C in F, \$ in pound, days in fortnight, miles in league, mph in speed of light, etc.
What you'll get: the converted answer



INTERNET THE BAD



HOAXES

<http://www.snopes.com>

Internet hoaxes and chain letters are e-mail messages written with one purpose; to be sent to everyone you know. Symptoms: The sender is known to the user, the threat sounds realistic, and the urgent nature prompts immediate action. Course of action: ignore and delete.

PHISHING

<http://www.antiphishing.org>

Phishing sites use 'spoofed' e-mails and fraudulent websites designed to fool recipients into divulging personal financial data such as credit card numbers, account usernames and passwords, social security numbers, etc. Never click on a link in your e-mail to verify information. Be highly skeptical of e-mail notification of account closures, especially from banks, eBay or PayPal.

SPAM

<http://spam.abuse.net>

Spam is unsolicited e-mail on the Internet. From the sender's point-of-view, it's a form of bulk mail. To the receiver, it usually seems like junk e-mail. It's generally equivalent to unsolicited phone marketing calls except that the user pays for part of the message since everyone shares the cost of maintaining the Internet.

SPYWARE

<http://www.safer-networking.org>

Spyware is a program installed on your computer that keeps track of your web surfing and sends the information back to the owner. It isn't illegal, but it will compromise your privacy online (by sending pop-up ads geared towards you) and will bog down your Internet connection (by using it, partially, to send and retrieve information about you from your computer).

VIRUSES

<http://vil.nai.com/vil/stinger/>

To prevent viruses from infecting your computer, never open suspicious e-mail messages, back up your information, download Critical Updates from Microsoft (<http://windowsupdates.microsoft.com>), install an anti-virus program and keep the definitions up to date.

INTERNET THE GOOD



BOOKS

LibraryThing: <http://www.librarything.com>
Google Books: <http://books.google.com>

EDUCATION

Free online university lectures:
Harvard: <http://athome.harvard.edu/>
MIT: <http://ocw.mit.edu/>
Princeton: <http://uc.princeton.edu/main/>
Yale: <http://oyc.yale.edu/>

KNOWLEDGE

Wikipedia: <http://www.wikipedia.com>
Wikipedia is a free-content encyclopedia, written collaboratively by people from all around the world.

LANGUAGE

Babelfish: <http://babelfish.yahoo.com/>
The Babel Fish Translation tool uses machine translation technology to translate sentences in one language into another language. Babel Fish can translate either text or full web pages from the internet.

PLACES

WebCams: <http://www.webcam-index.com>
Webcams are live cameras from around the world, projecting images onto the Internet.
Times Square: <http://www.earthcam.com/usa/newyork/timessquare/>

VIDEO:

Hulu: <http://www.hulu.com>
Hulu brings together a large selection of videos from more than 100 content providers, including FOX, NBC Universal, MGM, Sony Pictures Television, Warner Bros. and more. Users can choose from more than 900 current primetime TV hits such as *The Simpsons*, *The Daily Show with Jon Stewart* and *The Office* the morning after they air, classics like *Buffy the Vampire Slayer*, *The A-Team*, *Airwolf* and *Married...with Children*, movies like *Men in Black*, *Ghostbusters*, and *The Karate Kid*, and clips from *Saturday Night Live*, *Friends* and other popular TV shows and movies.

**INTERNET
NOTES**